ATTACHMENT C
to Resolution 14-4

Findings and Statement of Overriding Considerations

Introduction

Chapter III of the Staff Report: Initial Statement of Reasons (ISOR) prepared for the Proposed Amendments to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms provided an environmental analysis for the proposed amendments to the California Cap on GHG Emissions and Market-Based Compliance Mechanisms (Cap-and-Trade Regulation) posted September 4, 2013. A separate environmental analysis (EA) for the proposed addition of a new Compliance Offset Protocol for Mine Methane Capture (MMC Protocol) is included in the separate Staff Report prepared for the proposed protocol, included as Appendix A to the ISOR. The Chapter III analysis for the proposed amendments concluded those changes would not result in any new significant adverse impacts or an increase in the severity of any significant impacts on the environment than previously identified in the *Functional Equivalent Document prepared for the California Cap on GHG Emissions and Market-Based Compliance Mechanisms* (2010 FED). It further concluded those amendments may provide air emissions benefits as compared to current practices.

The environmental analysis (EA) chapter in Appendix A that analyzed the potential environmental impacts associated with the MMC Protocol was based on the expected compliance responses to the proposed protocol. That analysis determined that implementation of MMC projects would result in beneficial impacts to greenhouse gas emissions, no impacts to public services, and less than significant impacts to aesthetics, agriculture and forest resources, air quality, energy demand, geology/soils and minerals, hazards/hazardous materials, hydrology/water quality, land use, noise, population and housing, recreation, transportation and traffic, and utilities and service systems. It further concluded that impacts to biological resources and cultural resources are potentially significant related to landscape disturbance required for construction of facilities and infrastructure.

ARB's certified regulatory program requires that prior to adoption of an action for which significant adverse environmental impacts have been identified during the review process, that ARB consider all feasible mitigation measures and alternatives available which could substantially reduce such adverse impacts. (California Code of Regulations, title 17, section 60006.) CEQA places the burden on the approving agency to affirmatively show that it has considered feasible mitigation and/or alternatives that can lessen or avoid the impacts. A statement of findings for each identified significant impact is the means to show this consideration. (Public Resources Code section 21081.) CEQA Guidelines section 15091 provides direction on the content of the statement of findings. That section states that one or more of the following findings should be identified for each impact:

- Changes or alterations have been required in, or incorporated into, such project which avoid or substantially lessen the significant environmental effect as identified in the final environmental impact report.

- Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency, or can and should be adopted by such other agency.

- Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the environmental impact report.

Because the two potential adverse impacts identified in the programmatic level EA are potential indirect impacts associated with the compliance responses of offset project operators, the authority to determine site- or project-specific mitigation is within the purview of jurisdictions with local permitting authority, such as state or local governments and local air districts. ARB does not have the ability to determine with any specificity the project level impacts, nor the authority to require project-level mitigation in approving the MMC Protocol as discussed in the findings.

An agency may approve a project with unavoidable (unmitigated) adverse environmental impacts. When doing so, CEQA requires the agency to make a statement in the record of its views on the ultimate balancing of the merits of approving the project despite the environmental impacts in a "statement of overriding considerations." (Public Resources Code section 21081(b); CEQA Guidelines 15093.) The following presents the Board's statement of findings for each identified adverse impact, accompanied by a brief explanation, and its statement of overriding considerations.

Statement of Findings

The Board has considered the entire record, including the information contained in the EA, public testimony, written comments received, and the written responses to comments. Based on this information, the Board makes the following written findings for each significant adverse impact, accompanied by a brief explanation of the rationale for each finding. These findings are supported by substantial evidence in the record.

Biological Resources

Finding and Explanation:

The compliance responses consist of installing gas extraction, capture, transportation, treatment, destruction, and monitoring equipment. Installing equipment involves construction and vehicle travel that have the potential to adversely impact special status species and habitats that might exist at those locations. Direct impacts to special status species and habitats may result from, but not be limited to, construction or vehicle travel. Direct mortality could result from destruction of dens, burrows, or nests through ground compaction, ground disturbance, debris, or vegetation removal within mine sites due to compliance response activities. Indirect impacts to animals could result from noise disturbance that may result in nest or den abandonment and loss of reproductive or foraging potential around the site during construction, transportation, or destruction of equipment.

Installation of new wells or boreholes could have the potential to connect with underground aquifers and might cause water removal from aquifers. Removal or interruption of water from aquifers could cause dewatering of streams or springs important to special status species or habitats (such as wetlands or riparian habitat). Consequently, construction activities that disturb aquifer resources could pose a potentially significant impact to biological resources. Removal of water from mine sites as a result of drilling activities related to the installation of new boreholes or wells and subsequent dispersal of that water over and adjacent to the mine site could cause impacts to soil or water quality from salinization or sodium; especially if it leaches into another aquifer, nearby waterways or open water sources such as ponds. Salinity and sodium or other mineral changes to soils or available water for special status plants or aquatic wildlife could result in toxic impacts. Consequently, construction activities that disturb and distribute non-filtered aquifer resources could pose a potentially significant impact to biological resources on or adjacent to the mine site.

The MMC Protocol requires projects to be in compliance with all applicable federal, state, and local regulations and regulatory oversight requirements. Depending on the status of the species and the nature of the habitat disturbance, compliance with permitting requirements under the Surface Mining Control and Reclamation Act of 1977 (SMCRA), the National Environmental Policy Act (NEPA), the federal Endangered Species Act, the Migratory Bird Treaty Act, the Clean Water Act, or related state or local laws would be required. Accordingly, the potential impact to special-status species and sensitive habitats would be minimized. However, the possibility cannot be ruled out that a special-status species or its habitat could be adversely affected, even with applicable regulations in place, under some circumstances.

The EA identified recognized measures, including existing statutes and regulations and operating permit requirements designed to reduce this potentially significant impact, but the authority to determine project-level impacts and require project-level mitigation

lies with the permitting agency for individual projects. ARB does not have the authority to require project-level mitigation. Further, the programmatic analysis in the EA does not allow project-specific details of mitigation, resulting in an inherent uncertainty in the degree of mitigation ultimately implemented to reduce the potentially significant impacts. Consequently, the Board takes a conservative approach in its post-mitigation significance conclusion and finds this impact potentially significant and unavoidable.

Cultural Resources

Finding and Explanation:

The installation of mine methane gas extraction, capture, transportation, treatment, destruction, and monitoring equipment would be located at both active mining operations as well as abandoned mines. Construction activities related to such installation could include drilling, boring, trenching and other activities that would generally be consistent with ongoing permitted mining activities. However, the scope and extent of additional ground disturbance or related activities could still potentially affect cultural resources in areas not covered by existing permits, particularly subsurface areas at mines or in adjacent lands that were previously undisturbed. Potential adverse effects include direct damage to or destruction of undocumented historical resources of an architectural or archaeological nature; undocumented human remains not interred in cemeteries or marked, formal burials; or unique paleontological resources or sites by ground-disturbance or demolition activities at the surface or in the subsurface, particularly during trenching for underground pipelines and utility infrastructure or drilling new wells or boreholes. Direct impacts to such resources may result from, but not be limited to, the immediate disturbance of the materials, features or deposits, whether from vegetation removal, compaction or vibrations resulting from vehicle travel over the surface, earth-moving activities, excavation, or demolition of overlying structures.

Because of the possible presence of identified or undocumented historical resources, significant or unique archaeological resources, undocumented human remains, or unique paleontological resources or sites that could be directly or indirectly disturbed, materially altered, or demolished by project implementation, compliance response could result in potentially significant impacts to cultural resources.

The MMC Protocol requires projects to be in compliance with all applicable federal, state, and local regulations and regulatory oversight requirements. These could include provisions to protect cultural resources within SMCRA, Section 106 of the National Historic Preservation Act, the Native American Graves Protection and Repatriation Act of 1990 (NAGPRA), the Archaeological Resources Protection Act (ARPA), and the Paleontological Resources Preservation Act, or related state or local laws. While these regulatory activities could serve to reduce or minimize adverse effects on cultural resources, impacts would remain potentially significant under some circumstances where federal, state or local regulatory oversight is limited, or where cultural resource surveys have not been previously conducted and, as a result,

resources that may be disturbed by construction have not yet been discovered or documented.

The EA identified recognized measures, including existing statutes and regulations and operating permit requirements designed to reduce this potentially significant impact, but the authority to determine project-level impacts and require project-level mitigation lies with the permitting agency for individual projects. ARB does not have the authority to require project-level mitigation. Further, the programmatic analysis in the EA does not allow project-specific details of mitigation, resulting in an inherent uncertainty in the degree of mitigation ultimately implemented to reduce the potentially significant impacts. Consequently, the Board takes a conservative approach in its post-mitigation significance conclusion and finds this impact potentially significant and unavoidable.

Findings on Alternatives to the Project

In addition to the No Project Alternative, the EA considered a reasonable range of action alternatives potentially capable of reducing the adverse environmental impacts associated with the MMC Protocols while accomplishing most of the project objectives.

The Board finds the alternatives analysis is sufficient to inform the Board and the public regarding the tradeoffs between the degree to which the alternatives could reduce environmental impacts and the corresponding degree to which the alternatives could achieve the project objectives.

Based upon a full evaluation of the alternatives, the Board finds that adoption and implementation of the proposed MMC Protocol is the most desirable, feasible, and appropriate action for achieving the objectives of the project, and the Board rejects the other alternatives as either less desirable or infeasible based on consideration of the relevant factors identified in the EA and briefly described below:

A. <u>No Project Alternative</u>
   The EA analyzed a No Project Alternative. This alternative would have ARB not adopt the MMC Protocol meaning that California entities could not use carbon offset credits for emission reductions achieved from the installation and operation of a device or set of devices that capture and destroy methane that would otherwise be released into the atmosphere as a result of mining. There would be no significant environmental impacts under the No Project alternative, because no compliance responses would occur. Environmental benefits resulting from the capture of methane achieved under the proposed project would also not occur. The primary objectives of offsets in the Cap-and-Trade program that are applicable to the proposed MMC Protocol are described in the EA. By not implementing the MMC Protocol, none of the primary objectives would be achieved. The supply of offsets to broaden the compliance instrument market would not be expanded, thereby diminishing an opportunity to ensure cost-effective GHG reductions. Potential technological innovations developed through the implementation of MMC technologies and associated projects would

not occur, and the potential for additional GHG emissions within the mining sector would not be achieved. For the foregoing reasons, the Board rejects this alternative.

B. Exclude Abandoned Mines Alternative

The EA analyzed an MMC Protocol with alternative design features including limiting the issuance of Air Resources Board Offset Credits (ARBOCs) to the destruction of methane extracted from active surface or underground mines only. Abandoned underground mine methane recovery activities would be excluded. Abandoned mining sites, similar to active mines, are subject to regulation of reclamation activities under SMCRA. The EA identified potentially significant impacts to biological and cultural resources at these sites. Exclusion of abandoned underground mine methane recovery activities would avoid environmental impacts at abandoned mining sites; however, potentially significant biological and cultural resources impacts could still occur at active mining sites in cases where the MMC Protocol would still apply. Environmental effects related to other resource topics would be similar to those described for the proposed MMC Protocol. This alternative would result in fewer ARBOCs being issued than under the proposed MMC Protocol. Because issuance of ARBOCs would still occur for projects at active mining operations, this alternative would be consistent with the stated primary objectives of the project but would not fulfill those objectives to the fullest extent. Excluding abandoned mines could result in a narrower range of potential activities, resulting in a reduced supply of offsets available and therefore a lower potential for program cost effectiveness in the cap-and-trade program. Similarly, eliminating abandoned mines would result in fewer opportunities for technological innovation that could occur as a result of project deployment, and fewer GHG reductions would be achieved under this alternative than under the proposed MMC Protocol. Therefore, while this alternative is conceptually feasible, the primary objectives would not be fully realized. For the foregoing reasons, the Board rejects this alternative.

C. Surface Equipment Only Alternative

The EA analyzed an MMC Protocol with alternative design features including limiting the issuance of ARBOCs to projects that involve the installation of surface equipment for the destruction of mine methane extracted only from (1) existing permitted ventilation shafts and drainage wells/boreholes currently located at an active or abandoned mine, or (2) new ventilation shafts and drainage wells/ boreholes slated to be constructed in a mine plan for currently operating or new mines that are identified as necessary to ongoing or proposed mining activities.

MMC projects requiring construction of entirely new ventilation shafts and drainage wells/boreholes at a new or existing mine for the sole purpose of receiving ARBOC's for mine methane capture and destruction would not receive credit under this alternative. Similarly, other compliance response activities, such as construction of gathering pipelines for gas transport, construction of gas treatment facilities, or other activities with the potential for significant excavation,

trenching, drilling or other construction methods involving substantial ground disturbance would be excluded under this alternative.

By restricting MMC projects to surface equipment installations connecting with existing or new ventilation or drainage systems as defined above, this alternative would avoid the need for drilling additional wells or boreholes and, therefore, avoid or further reduce potentially significant impacts to biological and cultural resources. Likewise, excluding the possibility of additional drilling, excavation or other substantial ground-disturbing construction activities related to gas extraction, transport, and treatment would avoid and/or further reduce potentially significant impacts to biological and cultural resources. Environmental effects related to other resource topics would be similar to those described for the proposed MMC Protocol.

This alternative would substantially reduce the range of potential MMC project compliance responses and, accordingly, the amount of mine methane captured, destroyed, and credited for all four activity types described in the proposed MMC Protocol. Compared to the "No Abandoned Mines" alternative, this alternative could result in substantially fewer ARBOCs being issued and would, therefore, fall short of meeting the primary objectives of achieving the maximum technologically feasible and cost effective GHG emission reductions, encouraging technological innovation in non-capped sectors, and decreasing greenhouse gas emissions. For the foregoing reasons, the Board rejects this alternative.

STATEMENT OF OVERRIDING CONSIDERATIONS

The Board finds that despite the potentially significant impacts to biological and cultural resources associated with the proposed MMC Protocol, other benefits of this regulatory action are determined to be overriding considerations that warrant approval of the project and outweigh and override its unavoidable significant effects. These benefits include:

1. Ensuring Cap-and-Trade Program Cost Effectiveness. AB 32 states that the Board shall adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions in furtherance of meeting the State's GHG reduction goals. Offsets serve to broaden the compliance instrument market to provide greater flexibility to California businesses by offering a wider range of emissions reduction opportunities and greater market liquidity.

2. Encourage Technological Innovation and Reductions from Non-Capped Sectors. Offsets encourage reductions (beyond common business practice and what is required by regulation) from non-capped sources. Offsets support the development of innovative projects and technologies from sources outside capped sectors that can play a key role in reducing emissions both inside and outside California.

3. Decrease GHG Emissions. Offsets decrease GHG emissions in order to achieve the AB 32 mandate.

4. Maximize Environmental Benefits. Offsets maximize the environmental benefits for California.